

WHAT IS CLAIMED:

*Subs 1
a 2 2
3* 1. A method for use in a node of a packet network, the method comprising the steps of:

2 storing location information of other nodes of the packet network; and
4 exchanging the stored location information with adjacent nodes of the packet
5 network.

1 2. The method of claim 1 wherein the stored location information further
2 comprises associated time-stamp information for indicating an age of the location
3 information of the other nodes.

*Subs 1
a 2 2
3
4
5
6
7* 3. A method for use in a node of a packet network, the method comprising the steps of:

3 storing location information of other nodes of the packet network;
4 receiving location information from at least one adjacent node of the packet
5 network; and
6 merging the received location information with the stored location information for
7 updating the stored location information to more current values.

1 2 4. The method of claim 3 wherein the stored location information further
2 comprises associated time-stamp information for indicating an age of the location
3 information of the other nodes and wherein the merging step compares time-stamp
4 information for determining the more current values.

1 2 5. A method for use in a node of a packet network, the method comprising the
2 steps of:

3 transmitting location information of the node to nodes of the packet network that
4 are a part of a local topology of the node; and
5 transmitting a location list to nodes of the local topology that are adjacent, wherein
6 the location list comprises location information of at-least-some of the nodes of the packet
7 network.

*Subs
a22*

6. The method of claim 5 wherein the location list further comprises associated time-stamp information for indicating an age of the location information of the at-least-some of the nodes of the packet network.

1 7. The method of claim 5 wherein at least one of the transmitting steps is
2 periodically performed.

*Subs
a2*

1 8. The method of claim 5 comprising the steps of:
2 receiving location information from at least one adjacent node of the local
3 topology; and
4 merging the received location information with the location list for updating the
5 location list to more current values.

1 9. Apparatus for use in a node of a packet network, the apparatus comprising:
2 a global positioning system receiver for determining location information of the
3 node;
4 a memory for storing a location list comprising location information for other
5 nodes of the packet network; and
6 a communications interface for transmitting, at different times, the determined
7 location information of the node, and the stored location list, to at least one node of the
8 packet network.

1 10. Apparatus for use in a node of a packet network, the apparatus comprising:
2 a memory for storing a location list comprising location information for other
3 nodes of the packet network; and
4 a communications interface for transmitting the stored location list to at least one
5 adjacent node of the packet network.

1 11. The apparatus of claim 10 further comprising a processor and wherein the
2 communications interface receives a location list from at least one adjacent node of the
3 packet network and the processor merges the received location list with the stored
4 location list for updating the stored location list to more current values.

Add a2

Add a2